CLAIMS

The following is a copy of Applicant's claims that identifies language being added with underlining ("___") and language being deleted with strikethrough ("~~___~~"), as is applicable:

1. (Currently Amended) A composition, comprising:

a basic component;

an acidic component, wherein the acidic component is selected from alginic acid, gum arabic, nucleic acids, pectins, proteins, carboxymethylcellulose, ligninsulphonic acids, acid-modified starch, polyvinyl sulphonic acid, polystyrene sulphonic acid, polysulphuric acid, polyvinyl phosphonic acid, polyvinyl phosphoric acid, the homo- and copolymers of unsaturated aliphatic carbonic acids, the anhydrides of the unsaturated aliphatic carbonic acids, and combinations thereof;

at least one acrylate component;

oxidizing agent;

reducing agent;

a plurality of fibers, wherein the fibers are selected from polymer fibers, ceramic fibers, carbon fibers, glass fibers, and combinations thereof; and

a binder comprising a viscosity modifier and a surface tension modifier, the binder stimulating a reaction between the basic component and the acidic component, and wherein a polymerization reaction is initiated by the redox reaction between the oxidizing agent and the reducing agent.

2. (Original) The composition of claim 1, wherein the basic component is selected from metal oxides, metal oxide salts, reactive glasses, and combinations thereof.

3. (Canceled)

4. (Original) The composition of claim 1, wherein at least one acrylate component is selected from mono-functional acrylates, di-functional acrylates, tri-functional acrylates, tetra-functional acrylates, and combinations thereof.

5. (Original) The composition of claim 1, wherein the oxidizing agent selected from persulphates, benzoyl peroxides, hydroperoxides, cobalt (III) salts, iron (III) salts, hydrogen peroxides, and combinations thereof.

6. (Original) The composition of claim 1, wherein the reducing agent is selected from water-soluble amines, metal salts, hydrazines, and combinations thereof.

7. (Original) The composition of claim 1, wherein the viscosity modifier is selected from ethanol, hexanediol, pentanediol, ethylene glycol diacetate, potassium aluminum sulphate, isopropanol, ethylene glycol monobutyl ether, diethylene monobutyl ether, dodecyldimethylammonium proposane sulphonate, glycerine triacetate, ethyl acetoacetate, polyvinyl pyrrolidone, polyethylene glycol, polyacrylic acid, sodium polyacrylate, and combinations thereof.

8. (Original) The composition of claim 1, wherein the surface tension modifier is selected from ethanol, hexanediol, pentanediol, tergitols, ethylene glycols, fluorosurfactants, and combinations thereof.

9. (Original) The composition of claim 1, wherein the basic component is from about 20% to 90% by weight of the solid freeform composition, the acidic component is from about 1% to 40% by weight of the solid freeform composition, the at least one acrylate component is from about 5% to 50% by weight of the solid freeform composition, the oxidizing agent is from about 0.1% to 10% by weight of the solid freeform composition, the reducing agent is from about 0.1% to 10% by weight of the solid freeform composition, the viscosity modifier is from about 1% to about 30% by weight of the solid freeform composition, and the surface tension modifier is from about 0.01% to about 30% by weight of the solid freeform composition.

10. (Canceled)

11. (Previously Presented) The composition of claim 1, wherein a powder includes the basic component, the acidic component, a polyacrylate component, the fibers, and the oxidizing agent; and wherein the polar binder includes a polar

solvent, an acrylate component, the surface tension modifier, the viscosity modifier, and the reducing agent.

12. (Previously Presented) The composition of claim 1, wherein a powder includes the basic component, a polyacrylate component, the fibers, and the oxidizing agent; and wherein the polar binder includes a polar solvent, the acidic component, an acrylate component, the surface tension modifier, the viscosity modifier, and the reducing agent.

13. (Previously Presented) The composition of claim 1, wherein a powder includes the basic component, a first acidic component, a polyacrylate component, the fibers, and the oxidizing agent; and wherein the polar binder includes a polar solvent, a second acidic component, an acrylate component, the surface tension modifier, the viscosity modifier, and the reducing agent.

14. (Original) The composition of claim 1, further comprising components selected from a retardant, an inhibitor, a wetting agent, a colorant, an organic filler, an inorganic filler, and combinations thereof.

15. (Original) The composition of claim 14, wherein the organic filler is selected from polymethylmethacrylate, polyhydroxyethylmethacrylate, and combinations thereof.

16. (Canceled)

17. (Original) The composition of claim 1, further comprising:

a light sensitive radical initiator, wherein a polymerization reaction between the at least one acrylate component and the light sensitive initiator occurs upon exposure to light energy.

18. (Original) The composition of claim 17, wherein the light sensitive initiator is selected from ultraviolet initiators, visible initiators, and combinations thereof.

19. (Original) The composition of claim 17, wherein the basic component is from about 20% to 90% by weight of the solid freeform composition, the acidic

component is from about 1% to 40% by weight of the solid freeform composition, the at least one acrylate component is from about 5% to 50% by weight of the solid freeform composition, the oxidizing agent is from about 0.1% to 10% by weight of the solid freeform composition, the reducing agent is from about 0.1% to 10% by weight of the solid freeform composition, and the light sensitive initiator is from about 0.01% to 5% by weight of the solid freeform composition.

20-32. (Canceled)

33. (Previously Presented) The composition of claim 1, wherein the acidic component is selected from alginic acid, gum arabic, nucleic acids, pectins, proteins, carboxymethylcellulose, ligninsulphonic acids, acid-modified starch, polyvinyl sulphonic acid, polystyrene sulphonic acid, polysulphuric acid, polyvinyl phosphonic acid, polyvinyl phosphoric acid, the homo- and copolymers of unsaturated aliphatic carbonic acids, the anhydrides of the unsaturated aliphatic carbonic acids, and combinations thereof.

34. (Previously Presented) The composition of claim 1, wherein the viscosity modifier is selected from ethanol, hexanediol, pentanediol, potassium aluminum sulphate, isopropanol, diethylene monobutyl ether, dodecyldimethylammonium proposane sulphonate, ethyl acetoacetate, polyvinyl pyrrolidone, sodium polyacrylate, and combinations thereof.

35. (Previously Presented) The composition of claim 1, wherein the surface tension modifier is selected from ethanol, hexanediol, pentanediol, tergitols, fluorosurfactants, and combinations thereof.

36. (Previously Presented) The composition of claim 1, wherein the basic component is a reactive glass; wherein the acidic component is a polyacrylic acid; wherein the acrylate is a difunctional acrylate; wherein the oxidizing agent is peroxide; wherein the reducing agent water-soluble amine; wherein the binder is water; wherein the viscosity modifier is ethanol; and wherein the surface tension modifier is a fluoro surfactant.

37. (Previously Presented) The composition of claim 1, wherein the composition comprises two of the following: wherein the basic component is a reactive glass; wherein the acidic component is a polyacrylic acid; wherein the acrylate is a difunctional acrylate; wherein the oxidizing agent is peroxide; wherein the reducing agent water-soluble amine; wherein the binder is water; wherein the viscosity modifier is ethanol; and wherein the surface tension modifier is a fluoro surfactant.

38. (Previously Presented) The composition of claim 1, wherein the composition comprises three of the following: wherein the basic component is a reactive glass; wherein the acidic component is a polyacrylic acid; wherein the acrylate is a difunctional acrylate; wherein the oxidizing agent is peroxide; wherein the reducing agent water-soluble amine; wherein the binder is water; wherein the viscosity modifier is ethanol; and wherein the surface tension modifier is a fluoro surfactant.

39. (Previously Presented) The composition of claim 1, wherein the composition comprises four of the following: wherein the basic component is a reactive glass; wherein the acidic component is a polyacrylic acid; wherein the acrylate is a difunctional acrylate; wherein the oxidizing agent is peroxide; wherein the reducing agent water-soluble amine; wherein the binder is water; wherein the viscosity modifier is ethanol; and wherein the surface tension modifier is a fluoro surfactant.

40. (Previously Presented) The composition of claim 1, wherein the composition comprises five of the following: wherein the basic component is a reactive glass; wherein the acidic component is a polyacrylic acid; wherein the acrylate is a difunctional acrylate; wherein the oxidizing agent is peroxide; wherein the reducing agent water-soluble amine; wherein the binder is water; wherein the viscosity modifier is ethanol; and wherein the surface tension modifier is a fluoro surfactant.

41. (Previously Presented) The composition of claim 1, wherein the composition comprises six of the following: wherein the basic component is a reactive glass; wherein the acidic component is a polyacrylic acid; wherein the acrylate is a

difunctional acrylate; wherein the oxidizing agent is peroxide; wherein the reducing agent water-soluble amine; wherein the binder is water; wherein the viscosity modifier is ethanol; and wherein the surface tension modifier is a fluoro surfactant.

42. (Previously Presented) The composition of claim 1, wherein the composition comprises seven of the following: wherein the basic component is a reactive glass; wherein the acidic component is a polyacrylic acid; wherein the acrylate is a difunctional acrylate; wherein the oxidizing agent is peroxide; wherein the reducing agent water-soluble amine; wherein the binder is water; wherein the viscosity modifier is ethanol; and wherein the surface tension modifier is a fluoro surfactant.

43. (New) A composition, comprising:

a basic component;

an acidic component;

at least one acrylate component;

oxidizing agent;

reducing agent;

a plurality of fibers, wherein the fibers are selected from polymer fibers, ceramic fibers, carbon fibers, glass fibers, and combinations thereof; and

a binder comprising a viscosity modifier and a surface tension modifier, the binder stimulating a reaction between the basic component and the acidic component, and wherein a polymerization reaction is initiated by the redox reaction between the oxidizing agent and the reducing agent,

wherein the basic component is a reactive glass; wherein the acidic component is a polyacrylic acid; wherein the acrylate is a difunctional acrylate; wherein the oxidizing agent is peroxide; wherein the reducing agent water-soluble amine; wherein the binder is water; wherein the viscosity modifier is ethanol; and wherein the surface tension modifier is a fluoro surfactant.